Reply to Office action of: 04/01/2004

REMARKS/ARGUMENTS

Claim 12 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner states, "Claim 12 is unclear because it contains an abbreviation TPE which is not descriptive".

Applicant respectfully traverses the rejection. The abbreviation TPE is well known in the pertinent art. For example the <u>SCI.POLYMERS – Guide to Polymer Abbreviations</u> last modified on March 3, 1998, p 7, line 4 lists TPE as the accepted abbreviation for "thermoplastic elastomer" (copy enclosed for the Examiner's convenience). Additionally, commercial data sheets for thermoplastic elastomers routinely utilize the abbreviation TPE for the term "thermoplastic elastomer", see for example the data sheet for the DuPont product "Hylene TPE 9300C" thermoplastic elastomer (copy enclosed for the Examiner's convenience).

Applicant by this amendment has amended Claim 12 to add the term "thermoplastic elastomer" before the abbreviation TPE to more clearly particularly point out and distinctly claim the subject matter which applicant regards as the invention. Support for this amendment can be found in the above-cited references as well as in the specification on p. 8, paragraph 30, lines 1 – 3 and 10.

Applicant respectfully submits that the claims as amended, in fact, do particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In view of the foregoing, reconsideration of the rejection pursuant to 35 U.S.C. 112, second paragraph is respectfully solicited.

Claims 1-13 have been rejected under 35 U.S.C. 103(a) as being obvious. Specifically, the Examiner states:

Claims 1 –3, 7 –9 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5988579 to Moner, Jr. et al. and in view of United States Patent No. 5344112 to Peterson et al. and further in view of United States Patent No. 6388793 to Tamburrini et al.

Moner Jr. et al. discloses applicant's basic inventive concept, including a cup holder housing (12) having an opening on one end, a cupholder tray (10), including a body

Reply to Office action of: 04/01/2004

(24), two infinitely adjustable articulated arm units (44, 46) and a hinge (26, 28).

Moner, Jr. et al. does not disclose wherein the hinge is a living hinge. Peterson et al. shows an articulating arm (12) which is infinitely adjustable which is used for holding a cylindrical object, wherein the arm is attached to a body (22) via a living hinge, the hinge used for its resilient properties and simplicity. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Peterson et al. to have substituted the hinge in Moner, Jr. et al. for the living hinge, in order to simplify the hinge.

Moner, Jr. et al. and Peterson et al. do not disclose that the hinge is molded of a first plastic and over molded of a second plastic which has a spring like closing action or that the device is injection molded.

Tamburrini et al. shows a living hinge (220) wherein the device is injection molded (Col. 2, lines 45 – 50), the device having a first plastic and a second plastic which has a spring like closing action. (See claims 9, 11 and 12 found in Col. 4, 5 and 6), the second injection molded material used for its resilient properties. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Tamburrini et al. to have made the device of two different materials in order have the living hinge of a resilient material.

Claims 4, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5988579 to Moner, Jr. et al. and in view of United States Patent No. 5344112 to Peterson et al and in view of United States Patent No. 6388793 to Tamburrini et al. as applied to claims 1, 3, 7 and 9 and further in view of United States Patent Publication 2004/0011934 to Czepowicz et al.

Moner, Jr. et al, Peterson et al. and Tamburrini et al. Show the basic inventive concept with the exception that it does not teach that the device is made from polypropylene.

Czepowicz et al. shows a container holding device which is made of polypropylene which is generally used in injection molding for its viscous properties. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings

Appl. No.: 10/604050 Amdt. Dated: 6/6/2004

Reply to Office action of: 04/01/2004

of Czepowicz et al. to have made the device of polypropylene for its viscous properties.

Claims 5, 6, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5988579 to Moner, Jr. et al. and in view of United States Patent No. 5344112 to Peterson et al. as applied to claims 1 and 7 and further in view of United States Patent No. 2002/0096613 to Czepowicz.

Moner, Jr. et al, Peterson et al, and Tamburrini et al. Show the basic inventive concept with the exception that it does not teach that the device is made from a thermoplastic elastomer including Santoprene.

Czepowicz et al. shows a container holding device which is made of thermoplastic elastomer including Santoprene (See page 4, 0036) which is generally used in injection molding for its anti-slip properties. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Czepowicz et al. to have made the device of the thermoplastic Santoprene in order for the device to have anti-slip properties.

Applicant respectfully traverses the Examiner's rejection of Claims 1 – 3, and 7 – 9. The application of 35 U.S.C. 103 to the issue of patentability has been considered by the Supreme Court of the United States in <u>Graham v. John Deere</u>, 148 USPQ 459. The Supreme Court held that 35 U.S.C. 103 requires a three-pronged inquiry. It is necessary to:

- (i) determine the knowledge disclosed in the prior art;
- (ii) determine the differences between the teaching of the prior art and the claims at issue; and
- (iii) resolve the differences between the teaching of the prior art and the claims in question on the level of the ordinary skill in the art

On a fair reading, Moner, Jr. et al. 5988579 teaches a cupholder having:

- 1. A tray comprising a body portion with a base plate connected thereto by screws (see for example, Col. 3, lines 16-17).
- 2. The body portion includes arcuate walls which form an inner boundary of the cupholder areas (see for example, Col. 3, lines 18 19).

Amdt. Dated: 6/6/2004 Reply to Office action of: 04/01/2004

- 3. First and second separate cupholder arms pivotally connected to the body portion by screws being pivotable between fully extended and fully retracted positions (see for example, Col. 3, lines 24–27).
- 4. A spring is connected between the cupholder arms in order to bias the cupholder arms toward the respective fully extended positions or fully open positions (see for example, Col. 3, lines 40-42).
- 5. The separate cupholder arms are held in fully or partially retracted or closed positions by a sufficiently frictionally inhibiting means (see for example Col. 3, lines 43–48).

Moner, Jr. et al. 5988579 fails to teach the following:

- 1. A single unit comprising a body portion integral with first and second cupholder arms.
- 2. A biasing means that bias the cupholder arms toward the respective fully retracted or closed positions thereby eliminating the requirement of a sufficiently frictionally inhibiting means.
- 3. A biasing means integral to the single unit comprising both a body portion and the first and second cupholder arms.

Thus, Moner, Jr. et al. 5988579 fails to teach a cupholder which utilizes a single piece comprising both a body portion and a pair of cupholder arms which are normally biased toward a fully retracted or closed position and therefore without need of a sufficiently frictionally inhibiting means for each of said pair of cupholder arms.

When viewed in this light it is clear that Applicant's claimed invention is not disclosed or fairly suggested by the Moner, Jr. et al. 5988579 reference.

On a fair reading, Peterson et al. 5344112 teaches a canister mounting bracket having:

- 1. A circular attachment band integrally molded to a mounting base using an integrally molded hinge (see for example, Col. 1, lines 29-30).
- 2. The circular attachment band free end terminating in a clasp structure including a screw hole to allow locking of the mounting bracket around a canister (see for example, Col. 1, lines 34-36).
- 3. Complimentary ratchet structures on the mounting base and the attachment band free end allowing for loose permanent attachment of a canister during initial assembly

Appl. No.: 10/604050 Amdt. Dated: 6/6/2004

Reply to Office action of: 04/01/2004

and permanent closure of the band to the mounting base form rigid permanent attachment of the canister at final assembly (see for example, Col. 1, lines 36-44).

Peterson et al. 5344112 fails to teach the following:

- 1. An infinitely adjustable pivoting arm which may be opened and closed repeatedly without the need to release a ratcheting mechanism or remove a screw.
- 2. A biasing means to allow for the pivoting arm allowing the pivoting arm to return to a desired position when no container is within the unit.

Thus, Peterson et al. 5344112 fails to teach a practical means of providing a cupholder having the ability to adjust size to hold a variety of different sized containers. Nor does this reference teach or suggest how to have the hinged band to return to a desired position upon removal of a container held therein by a biasing means.

When viewed in this light it is clear that Applicant's claimed invention is not disclosed or fairly suggested by the Peterson et al. 5344112 reference.

On a fair reading, Tamburini et al. 6388793 teaches a scanner mirror dither spring assembly having:

- 1. A leaf type spring having a fixed end for attachment to a base mount and a free end for attachment of a mirror mount (see for example, Col. 2, lines 33-38).
- 2. The dither spring is further defined as having central openings to provide for the desired flexibility of the spring with desired resonant frequency characteristics (see for example, Col. 2, lines 38-40).
- 3. The dither spring is further taught as comprising a plastic such as Mylar™, or a metal such as beryllium or copper interchangeably (see for example, Col. 2, lines 33 35).
- 4. The dither spring is taught also to encompass an embodiment where a plastic living hinge is utilized comprising three sections. A first section preferably molded into a base mount, a second section which has a narrow diameter for accommodating flexure, and a third section preferably molded into the mirror mount (see for example, Col. 4, lines 37-42).
- 5. Alternatively, a co-molded elastomer hinge may be employed instead of the living hinge. The whole assembly is injection molded, but the hinge is preferably constructed of a different durometer material which is more pliable and possibly less subject to fatigue failure over time (see for example, Col. 4, lines 44 54).

Appl. No.: 10/604050 Amdt. Dated: 6/6/2004

Reply to Office action of: 04/01/2004

Tamburini et al. 6388793 fails to teach the following:

- 1. Any cupholder.
- 2. A living hinge molded between a cupholder body and cupholder pivoting arms.
- The need for a biasing means to return the pivoting arms to a desired rest position.

Thus, Tamburini et al. 6388793 fails to teach one skilled in the appropriate art how to make a cupholder having pivoting arms molded simultaneously with an integral base unit and connected by a living hinge, said arms being biased to return to a desired rest position upon removal of a container from said cupholder. Instead this reference teaches how to make a resonating spring for use in moving a mirror in a scanning device.

When viewed in this light it is clear that Applicant's claimed invention is not disclosed or fairly suggested by the Tamburini et al. 6388793 reference.

No combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 disclose or fairly suggest Applicant's claimed invention. Even if these references were combinable, which they are not, they do not suggest or fairly suggest Applicant's claimed invention.

Moner, Jr. et al. 5988579 requires the use of a multi-piece base unit assembled using screws, two separate pivoting arms mounted on pivots, and a biasing spring to cause the separate arms to be in a normally fully open position. Applicant's invention eliminates the need for a multi-piece base unit, the need for separate arms, the need for pivots, the need for a biasing spring, and provides for a normally closed arm position.

Peterson et al. 5344112 requires that a molded unit for mounting a canister have a base unit and a band attached to the base unit by means of a molded hinge. This reference also requires as a critical item a ratchet assembly having complimentary sections located on the free end of the band and on the base unit which engage to close permanently the canister-mounting unit. In addition, a screw hole for allowing permanent closure of the band is provided as well as a means of preventing the weight of the canister from twisting and pulling the free end of the band out of the base unit. Applicant's invention is directed to temporarily holding beverage containers and the like, permanent mounting is undesirable.

Tamburini et al. 6388793 requires an oscillating spring for moving a mirror in a scanning device, said spring may utilize a living hinge at the flexure point or it may utilize a co-molded elastomer hinge preferably of two different durometer elastomers.

Appl. No.: 10/604050 Amdt. Dated: 6/6/2004

Reply to Office action of: 04/01/2004

Furthermore, these different elastomers are not over-molded but are separate sections molded inline. This reference does not provide for any means of temporarily holding a container.

None of these three references provides the required impetus to teach one skilled in the art to combine their teachings to form the claimed invention of Applicant. None of them provide the necessary impetus to change the pair of pivoting arms biased with a spring of Moner, Jr. et al. 5988579 with a single molded unit utilizing a living hinge biased with an over-molded elastomer of Applicant's claimed invention.

Instead Peterson et al. 5344112 teaches a one piece molded permanent mounting unit for a canister useful during assembly of an automotive vehicle. Tamburini et al. 6388793 teaches a spring to oscillate a mirror in a scanning device which may utilize a living hinge or two different durometer materials molding inline simultaneously. The reference is not directed to any sort of container holding device, nor does it teach how to over-mold to create a biasing of a hinge. Thus, once again the combination fails to provide the required impetus to reach Applicant's claimed invention.

When viewed in this light it is clear that no combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 is possible. Furthermore, even if combination was possible, none of the references teach how to provide for a biased living hinge. Clearly, Applicant's claimed invention is not disclosed or fairly suggested by any combination of the Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 references.

Applicant respectfully traverses the Examiner's rejection of Claims 4, 10 and 12. As pointed out hereinabove Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 do not alone, or in any combination, disclose or fairly suggest Applicant's invention.

Czepowicz et al. 2004/0011934 has a publication date almost six months after Applicant's application was filed and therefore is not prior art as to Applicant's claimed invention.

But even if this reference were prior art, neither this reference or any combination of this reference with Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 disclose or fairly suggest Applicant's invention. Applicant's has not

Reply to Office action of: 04/01/2004

claimed the use of polypropylene for molding in general, only as a preferred material in the production of the claimed cupholder.

On a fair reading, Czepowicz et al. 2004/0011934 teaches a device for holding one or more inverted containers containing a viscous material therein having:

- 1. A free standing unitary body adapted to stably support an inverted container on a flat surface (see for example, page 2, paragraph 0028, lines 3-6).
- 2. The unitary body preferably comprising a smoothly arched member embodying at least one arcuate surface (see for example, page 2, paragraph 0028, lines 9-10).
- 3. The unitary body having at least one opening in its upper surface (see for example, page 3, paragraph 0028, lines 25-36).
- 4. Said opening is sized to permit a container cap of about 1.25 inch diameter to loosely pass through it (see for example page 3, paragraph 0028, lines 30 36).
- 5. The unitary body is preferably constructed of injection-moldable grade polypropylene (see for example page 4, paragraph 0035, lines 9-11).

Czepowicz et al. 2004/0011934 teaches fails to teach the following:

- 1. A cupholder capable of being mounted in the passenger compartment of an automotive vehicle.
- 2. A device capable of holding an open container in an upright position.
- 3. Any means of temporarily increasing or decreasing the size of the opening for receiving a container.
- 4. How to replace the separate arms and biasing spring of Moner, Jr. et al. 5988579 with a living hinge having an over-molded biasing material.

No combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2004/0011934 disclose or fairly suggest Applicant's claimed invention. Even if these references were combinable, which they are not, they do not suggest or fairly suggest Applicant's claimed invention.

Moner, Jr. et al. 5988579 requires the use of a multi-piece base unit assembled using screws, two separate pivoting arms mounted on pivots, and a biasing spring to cause the separate arms to be in a normally fully open position. Applicant's invention eliminates the need for a multi-piece base unit, the need for separate arms, the need for pivots, the need for a biasing spring, and provides for a normally closed arm position.

Reply to Office action of: 04/01/2004

Peterson et al. 5344112 requires that a molded unit for mounting a canister have a base unit and a band attached to the base unit by means of a molded hinge. This reference also requires as a critical item a ratchet assembly having complimentary sections located on the free end of the band and on the base unit which engage to close permanently the canister-mounting unit. In addition, a screw hole for allowing permanent closure of the band is provided as well as a means of preventing the weight of the canister from twisting and pulling the free end of the band out of the base unit. Applicant's invention is directed to temporarily holding beverage containers and the like, permanent mounting is undesirable.

Tamburini et al. 6388793 requires an oscillating spring for moving a mirror in a scanning device, said spring may utilize a living hinge at the flexure point or it may utilize a co-molded elastomer hinge preferably of two different durometer elastomers. Furthermore, these different elastomers are not over-molded but are separate sections molded inline. This reference does not provide for any means of temporarily holding a container.

Czepowicz et al. 2004/0011934 teaches a device for holding containers in an inverted position and that said device may be injection molded of polypropylene. It does not disclose or fairly suggest how to hold a container in an upright position.

None of these four references provides the required impetus to teach one skilled in the art to combine their teachings to form the claimed invention of Applicant. None of them provide the necessary impetus to change the pair of pivoting arms biased with a spring of Moner, Jr. et al. 5988579 with a single molded unit utilizing a living hinge biased with an over-molded elastomer of Applicant's claimed invention

Instead Peterson et al. 5344112 teaches a one piece molded permanent mounting unit for a canister useful during assembly of an automotive vehicle. Tamburini et al. 6388793 teaches a spring to oscillate a mirror in a scanning device which may utilize a living hinge or two different durometer materials molding inline simultaneously. The reference is not directed to any sort of container holding device, nor does it teach how to over-mold to create a biasing of a hinge. Czepowicz et al. 2004/0011934 teaches the use of polypropylene to form a device for holding a container inverted on a flat surface. Thus, once again the combination fails to provide the required impetus to reach Applicant's claimed invention.

Reply to Office action of: 04/01/2004

When viewed in this light it is clear that no combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2004/00111934 is possible. Furthermore, even if combination was possible, none of the references teach how to provide for a biased living hinge. Clearly, Applicant's claimed invention is not disclosed or fairly suggested by any combination of the Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2004/00111934 references.

Applicant respectfully traverses the Examiner's rejection of Claims 5, 6, 11 and 13. As pointed out hereinabove Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 do not alone, or in any combination, disclose or fairly suggest Applicant's invention.

Neither the Czepowicz et al. 2002/0096613 reference nor any combination of this reference with Moner, Jr. et al. 5988579, Peterson et al. 5344112, and Tamburini et al. 6388793 disclose or fairly suggest Applicant's invention. Applicant's has not claimed the use of thermoplastic elastomer for molding in general or even for anti-slip features in general, but only as a preferred material to provide the desired spring biasing effect for the articulating arms in the production of the claimed cupholder.

On a fair reading, Czepowicz et al. 2002/0096613 teaches a device for holding one or more inverted containers containing a viscous material therein having:

- 1. A freestanding body adapted to support stably an inverted container on a flat surface (see for example, page 1, paragraph 0004, lines 1-4).
- 2. The body preferably comprising a portion of an approximate right round hollow cylinder having an arcuate surface having two arcuate edges and two approximately straight longitudinal edges lying approximately in a plane (see for example, page 1, paragraph 0004, lines 5-8).
- 3. The unitary body having at least one opening sized to permit a container camp to loosely pass through in its upper surface (see for example, page 1, paragraph 0004, lines 11-13).
- 4. In a preferred embodiment slit Santoprene tubing is mounted on the longitudinal edges of the body to provide anti-slipping properties between the body and the surface it is resting on (see for example, page 4, paragraph 0036, lines 1-14).

Reply to Office action of: 04/01/2004

5. That urethane tubing is equivalent to Santoprene tubing (see for example, page 4, paragraph 36, lines 6-9).

Czepowicz et al. 2002/0096613 teaches fails to teach the following:

- 1. A cupholder capable of being mounted in the passenger compartment of an automotive vehicle.
- 2. A device capable of holding an open container in an upright position.
- 3. Any means of temporarily increasing or decreasing the size of the opening for receiving a container.
- 4. How to replace the separate arms and biasing spring of Moner, Jr. et al. 5988579 with a living hinge having an over-molded biasing material.
- 5. That Santoprene thermoplastic elastomer over-molded on Applicant's invention can provide the necessary spring biasing function.

No combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2002/0096613 disclose or fairly suggest Applicant's claimed invention. Even if these references were combinable, which they are not, they do not suggest or fairly suggest Applicant's claimed invention.

Moner, Jr. et al. 5988579 requires the use of a multi-piece base unit assembled using screws, two separate pivoting arms mounted on pivots, and a biasing spring to cause the separate arms to be in a normally fully open position. Applicant's invention eliminates the need for a multi-piece base unit, the need for separate arms, the need for pivots, the need for a biasing spring, and provides for a normally closed arm position.

Peterson et al. 5344112 requires that a molded unit for mounting a canister have a base unit and a band attached to the base unit by means of a molded hinge. This reference also requires as a critical item a ratchet assembly having complimentary sections located on the free end of the band and on the base unit which engage to close permanently the canister-mounting unit. In addition, a screw hole for allowing permanent closure of the band is provided as well as a means of preventing the weight of the canister from twisting and pulling the free end of the band out of the base unit. Applicant's invention is directed to temporarily holding beverage containers and the like, permanent mounting is undesirable.

Tamburini et al. 6388793 requires an oscillating spring for moving a mirror in a scanning device, said spring may utilize a living hinge at the flexure point or it may

Reply to Office action of: 04/01/2004

utilize a co-molded elastomer hinge preferably of two different durometer elastomers. Furthermore, these different elastomers are not over-molded but are separate sections molded inline. This reference does not provide for any means of temporarily holding a container.

Czepowicz et al. 2002/0096613 teaches a device for holding containers in an inverted position and that said device may be formed of pre-formed tubing and further may have preformed Santoprene or urethane tubing mounded as anti-skid surfaces. It does not disclose or fairly suggest how to hold a container in an upright position or the use of Santoprene over-molded to provide the necessary spring biasing action.

None of these four references provides the required impetus to teach one skilled in the art to combine their teachings to form the claimed invention of Applicant. None of them provide the necessary impetus to change the pair of pivoting arms biased with a spring of Moner, Jr. et al. 5988579 with a single molded unit utilizing a living hinge biased with an over-molded elastomer of Applicant's claimed invention

Instead Peterson et al. 5344112 teaches a one piece molded permanent mounting unit for a canister useful during assembly of an automotive vehicle. Tamburini et al. 6388793 teaches a spring to oscillate a mirror in a scanning device which may utilize a living hinge or two different durometer materials molding inline simultaneously. The reference is not directed to any sort of container holding device, nor does it teach how to over-mold to create a biasing of a hinge. Czepowicz et al. 2002/0096613 teaches the use of Santoprene as an anti-slipping material on a device for holding a container inverted on a flat surface. Thus, once again the combination fails to provide the required impetus to reach Applicant's claimed invention.

When viewed in this light it is clear that no combination of Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2002/0096613 is possible. Furthermore, even if combination was possible, none of the references teach how to provide for a biased living hinge. Clearly, Applicant's claimed invention is not disclosed or fairly suggested by any combination of the Moner, Jr. et al. 5988579, Peterson et al. 5344112, Tamburini et al. 6388793, and Czepowicz et al. 2002/0096613 references.

Reply to Office action of: 04/01/2004

Applicant notes that the Examiner has indicated prior art that is not the basis of a rejection as being considered pertinent applicant's disclosure. Because this art is not the basis of a rejection Applicant makes no further comment about said art.

In view of the remarks herein, and the amendments hereto, it is submitted that this application is in condition for allowance, and such action is respectfully solicited.

Respectfully submitted,

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Attachments